

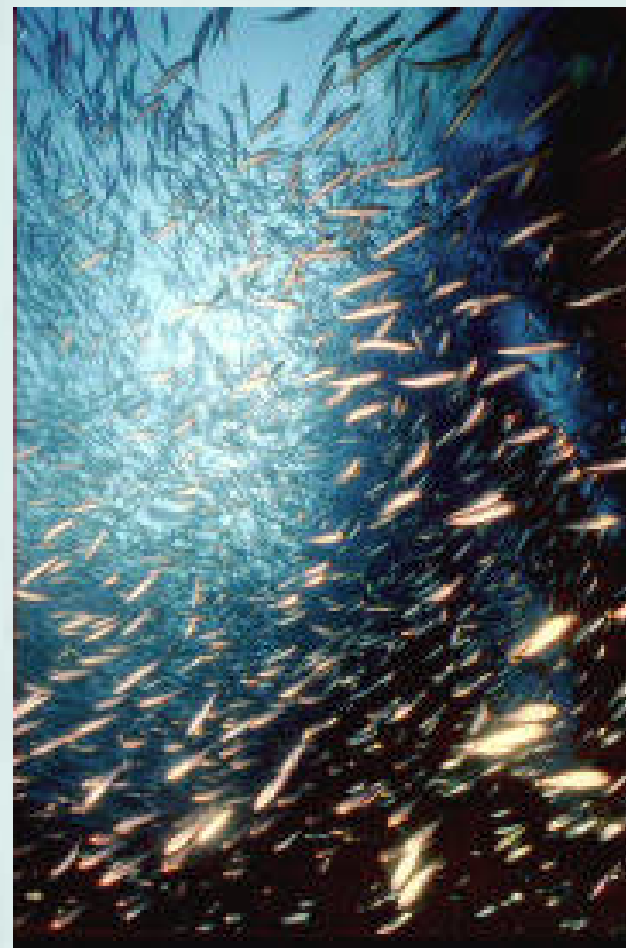
Resources Legacy Fund Foundation

The Marine Life Protection Act Initiative

Mike Weber, Program Officer—Oceans, Coasts, and Fisheries
California Biodiversity Council Meeting
March 24, 2011

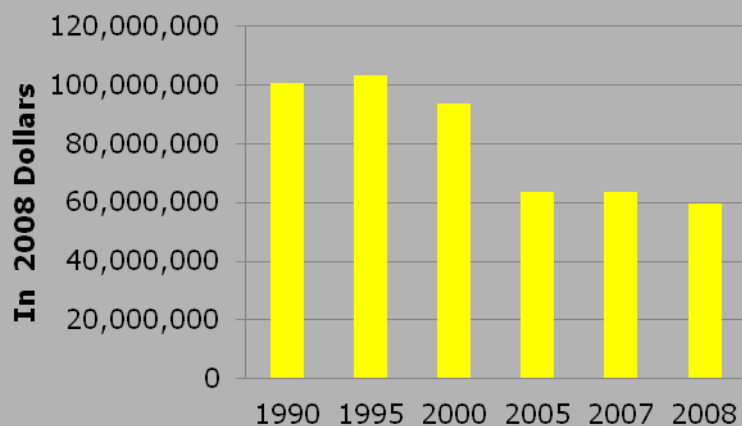
The Marine Life Protection Act Initiative

- Why we need networks of marine protected areas (MPA)
- The Marine Life Protection Act of 1999
- The Marine Life Protection Act Initiative (2004-2012)
- Establishing the statewide MPA network
- The challenge of implementation

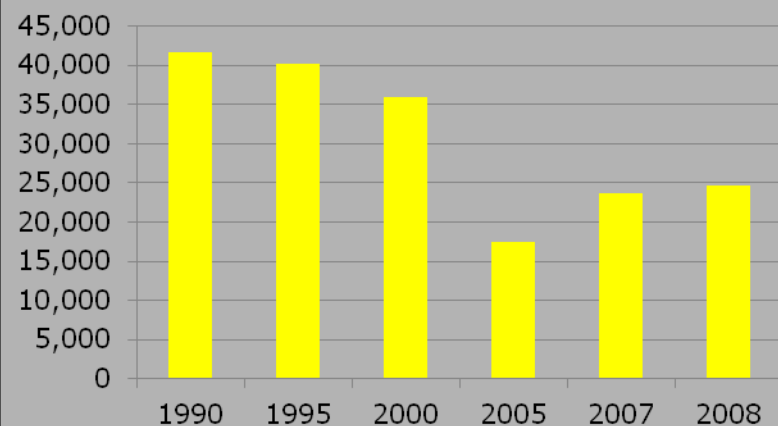


South Coast Commercial Fishery Trends: 1990-2008

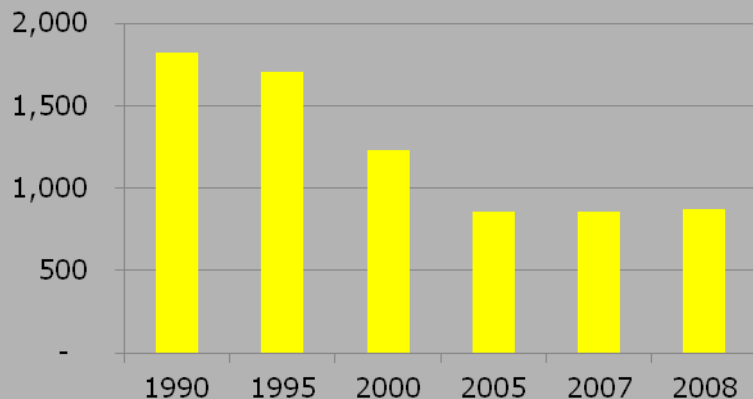
Commercial Fishing Revenues



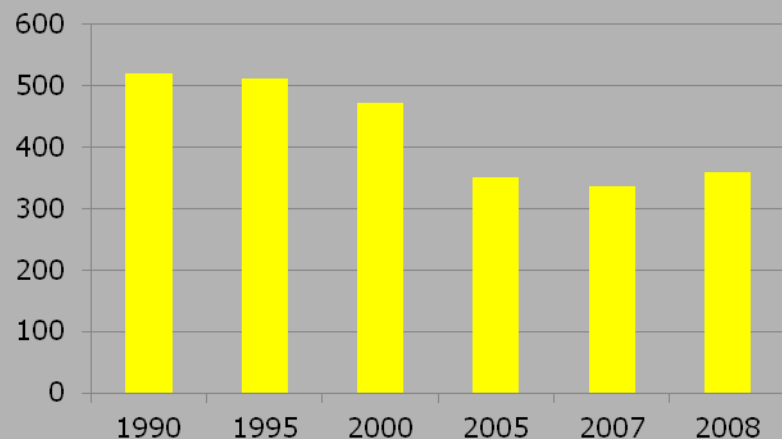
Commercial Fishing Trips



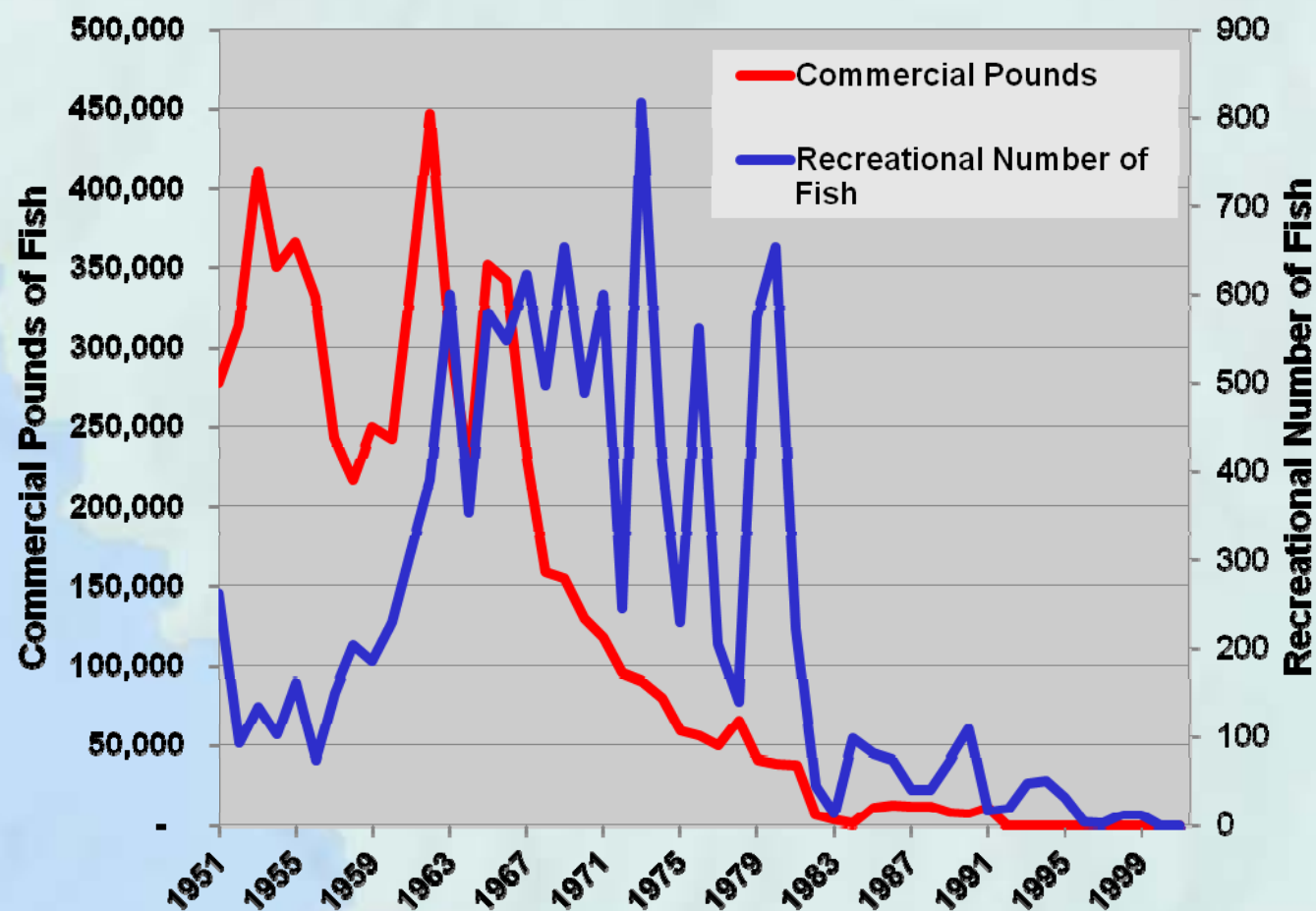
Number of Commercial Fishing Vessels with Landings



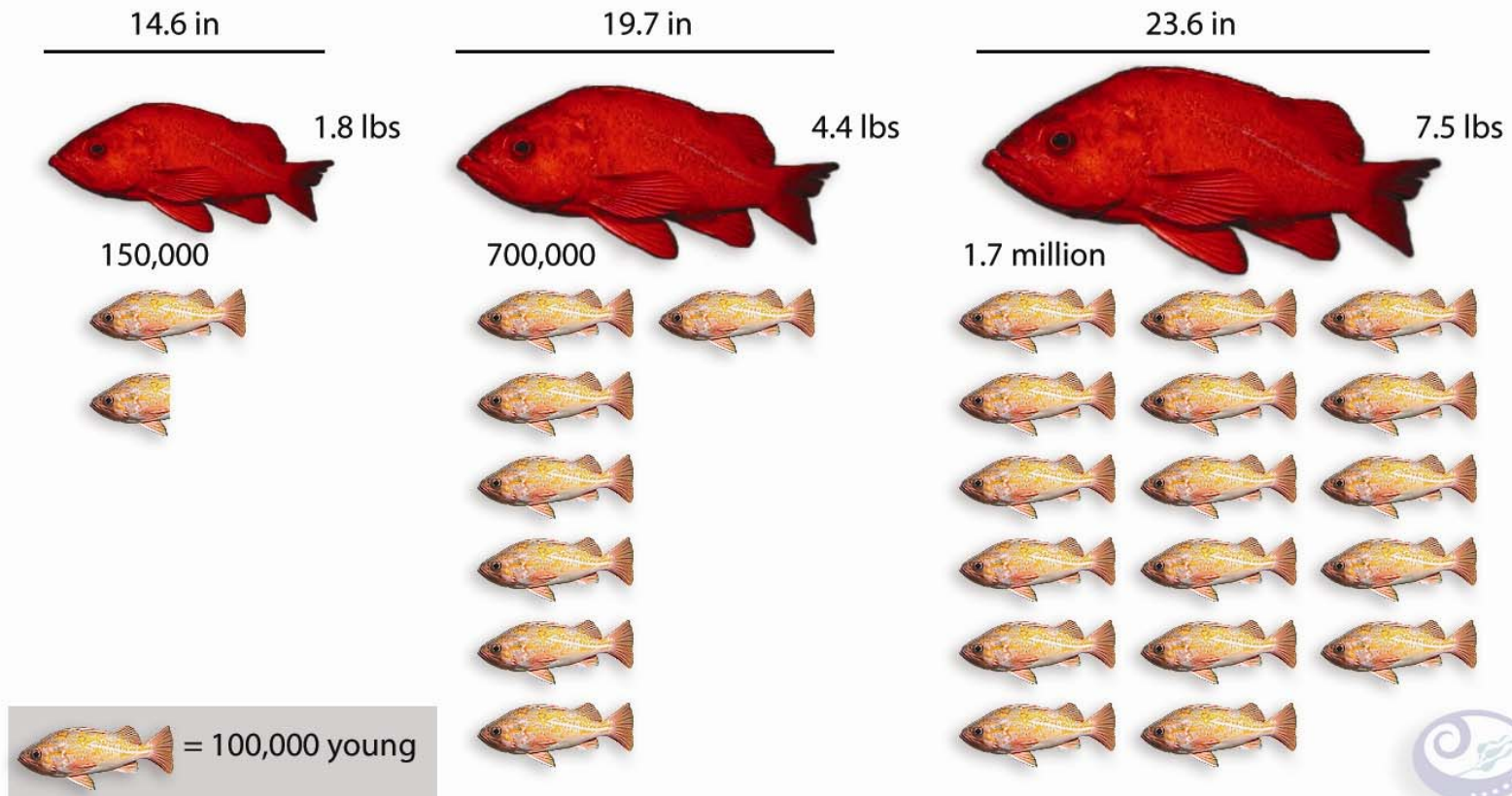
Number of Seafood Processors



Catches of Giant Sea Bass: 1951 - 2002



Big, Old, Fat Female Fish or BOFFFs



Average numbers of young produced by three different sizes of vermilion rockfish.
Data: Love et al. (1990) NOAA Technical Report

The Marine Life Protection Act (MLPA)

Origins

- Sustainable Fisheries Act in 1996
- MLMA
- Study of state's existing MPAs
- MLPA

Appendix A. The Marine Life Protection Act (MLPA)

THE PEOPLE OF THE STATE OF CALIFORNIA DO ENACT AS FOLLOWS:

SECTION 1. Chapter 10.5 (commencing with Section 2850) is added to Division 3 of the Fish and Game Code, to read:

CHAPTER 10.5. MARINE LIFE PROTECTION ACT

2850. Marine Life Protection Act

This chapter shall be known and may be cited as the Marine Life Protection Act.

2851. Legislative Findings and Declarations

The Legislature finds and declares all of the following:

(a) California's marine protected areas (MPAs) were established on a piecemeal basis rather than according to a coherent plan and sound scientific guidelines. Many of these MPAs lack clearly defined purposes, effective management measures and enforcement. As a result, the array of MPAs creates the illusion of protection while falling far short of its potential to protect and conserve living marine life and habitat.

(b) California's extraordinary marine biological diversity is a vital asset to the state and nation. The diversity of species and ecosystems found in the state's ocean waters is important to public health and well-being, ecological health, and ocean-dependent industry.

(c) Coastal development, water pollution, and other human activities threaten the health of marine habitat and the biological diversity found in California's ocean waters. New technologies and demands have encouraged the expansion of fishing and other activities to formerly inaccessible marine areas that once recharged nearby fisheries. As a result, ecosystems throughout the state's ocean waters are being altered, often at a rapid rate.

(d) Fish and other sea life are a sustainable resource, and fishing is an important community asset. MPAs and sound fishery management are complementary components of a comprehensive effort to sustain marine habitats and fisheries.

(e) Understanding of the impacts of human activities and the processes required to sustain the abundance and diversity of marine life is limited. The designation of certain areas as sea life reserves can help expand our knowledge by providing baseline information and improving our understanding of ecosystems where minimal disturbance occurs.

(f) Marine life reserves are an essential element of an MPA system because they protect habitat and ecosystems, conserve biological diversity, provide a sanctuary for fish and other sea life, enhance recreational and educational opportunities, provide a reference point against which scientists can measure changes elsewhere in the marine environment, and may help rebuild depleted fisheries.

(g) Despite the demonstrated value of marine life reserves, only 14 of the 220,000 square miles of combined state and federal ocean water off California, or six-thousandths of 1 percent, are set aside as genuine no take areas.

(h) For all of the above reasons, it is necessary to modify the existing collection of MPAs to ensure that they are designed and managed according to clear, conservation-based goals and guidelines that take full advantage of the multiple benefits that can be derived from the establishment of marine life reserves.

The Master Plan: A Guide for the Development of Fishery Management Plans as directed by the Marine Life Management Act of 1998



DECEMBER 2001

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF FISH AND GAME
MARINE REGION



CALIFORNIA MARINE PROTECTED AREAS



BY DEBORAH A. MCARDLE

A PUBLICATION OF THE CALIFORNIA SEA GRANT COLLEGE SYSTEM

PUBLIC LAW 104-297—OCT. 11, 1996

110 STAT. 3559

Public Law 104-297
104th Congress

An Act

To amend the Magnuson Fishery Conservation and Management Act to authorize appropriations, to provide for sustainable fisheries, and for other purposes.

OCT. 11, 1996
[S. 39]

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE; TABLE OF CONTENTS.

may be cited as the "Sustainable

The table of contents for this Act

Conservation and Management Act.
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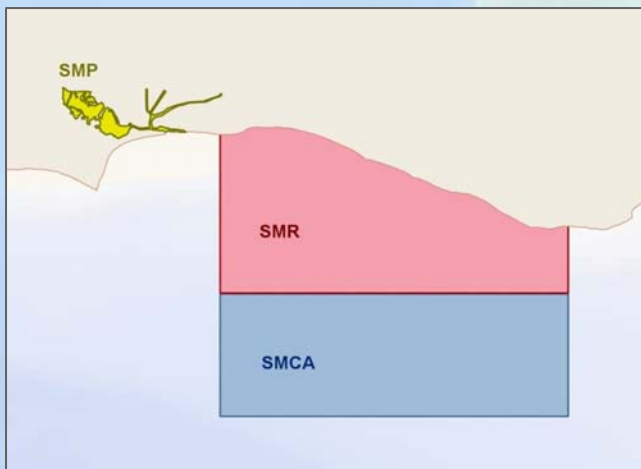
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STATUTE REAUTHORIZATIONS
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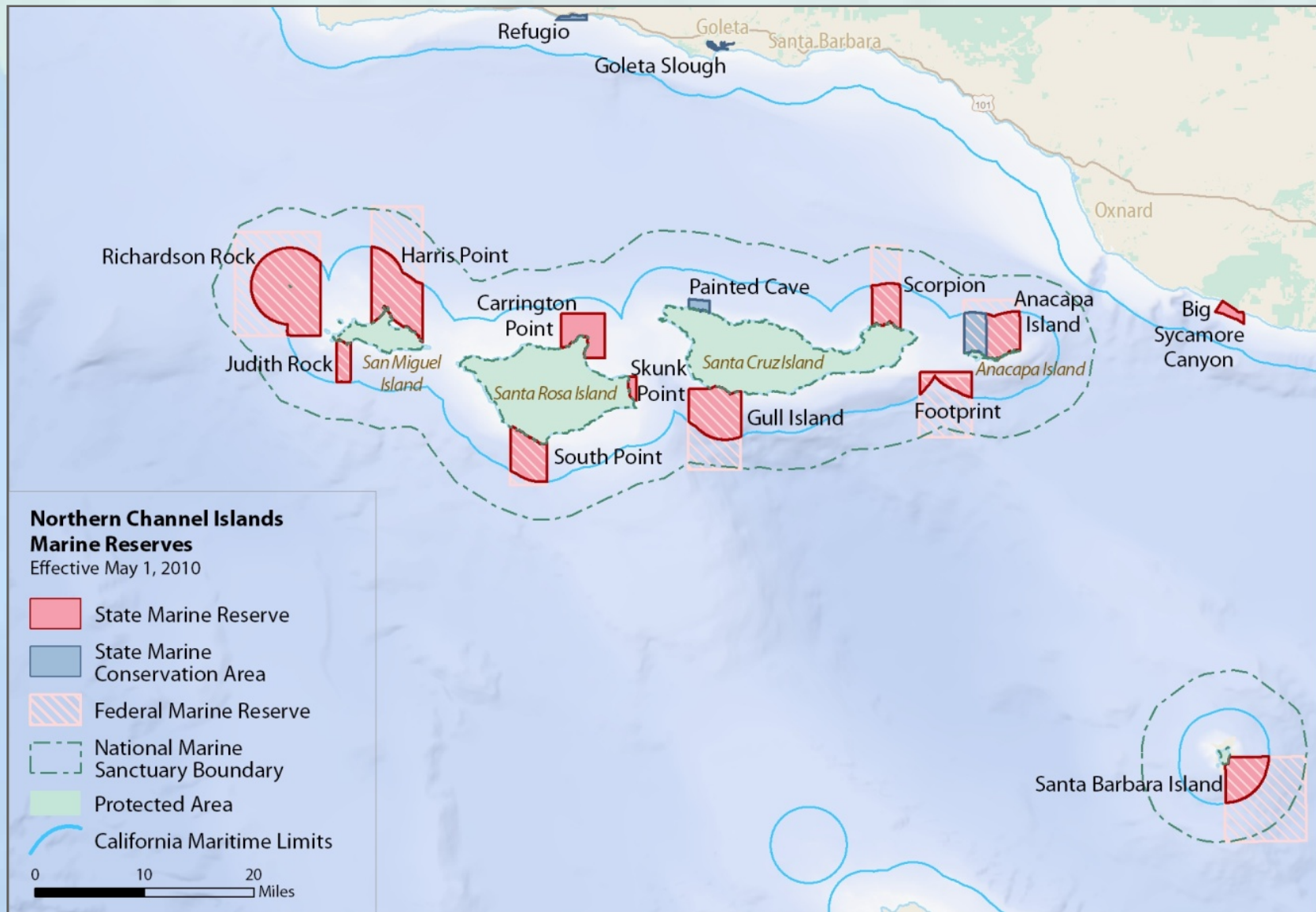
The Marine Life Protection Act (MLPA)

Goals of the Act:

- Protect diversity, abundance, ecosystems
- Help sustain, conserve and rebuild populations
- Improve recreational, educational, and study opportunities
- Protect unique and representative habitats
- Ensure MPAs have clear objectives, effective management and adequate enforcement
- Ensure MPAs designed and managed as a network



Channel Islands Marine Reserves (2003)



MLPA Initiative Design

Design principles

Public-Private Partnership

Structure

- Memorandum of Understanding
 - Roles and responsibilities
 - Deliverables

Initiative Planning Bodies

- Blue Ribbon Task Force (BRTF)
- Science Advisory Team (SAT)
- Regional Stakeholder Group (RSG)
- Support Staff

Partnership in the MLPA Initiative

- Government brings
 - Trust responsibility
 - Legal authority
 - Expertise
- Private sector brings
 - Expanded resources
 - Flexibility
 - Responsiveness

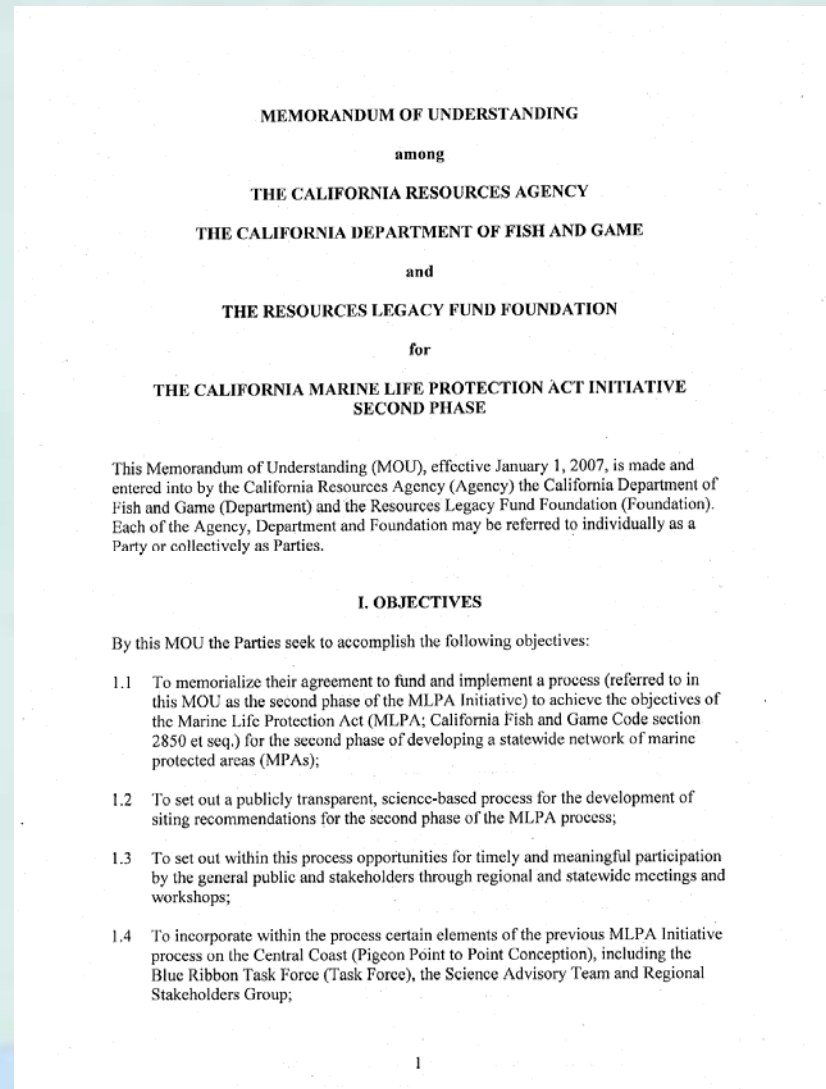


	STAGES AND ELEMENTS	*****	*****	Oct-05	*****	*****	Jan-06	*****	Mar-06	Apr-06	*****	Jun-06	Jul-06	*****	*****	Oct-06	*****	*****
II.	MASTER PLAN DEVELOPMENT																	
	Description of process for developing plan						Begin CEQA		CEQA done	Draft to		Public hearing		Public hearing			CFGC adopt	
1	Habitat 2055a(2)(d) Extent and types of habitat that should be represented in the MPA system. Extent and types of habitat that should be represented in marine reserves.	Prelim to BPP	BPP adopt	Peer review			Begin CEQA		CEQA done	Draft to CFGC		Public hearing a		Public hearing a			CFGC adopt	
2	Species Likely to Benefit 2055a(2)(e) List of species or groups of species Extent of key habitats for each	Prelim to BPP	BPP adopt	Peer review			Begin CEQA		CEQA done	Draft to CFGC		Public hearing a		Public hearing a			CFGC adopt	
3	Guidelines 2055a(2)(c) Attachments to guidelines in 2057	Draft to BPP	BPP adopt	Peer review			Begin CEQA		CEQA done	Draft to		Public hearing		Public hearing			CFGC adopt	
13	Guidance on design criteria (See 2057a(2)(3)) Size, number, type, location	Draft to BPP	BPP adopt	Peer review			Begin CEQA		CEQA done	Draft to		Public hearing		Public hearing			CFGC adopt	
17	Definitions			Peer review			Begin CEQA		CEQA done	Draft to		Public hearing		Public hearing			CFGC adopt	
18	Biological and socioeconomic research			Peer review			Begin CEQA		CEQA done	Draft to		Public hearing		Public hearing			CFGC adopt	
	Develop and implement statewide research strategy	Research h	Research h	Research h	Research h	Research h	Status report	Research h	Research h	Research h	Research h	Research h	Research h	Research h	Final report			
19	Take into account stakeholder information on the following 2055c: Marine environment, history of fishing and other uses, closures, water pollution, socioeconomic conditions and environmental impacts of						Begin CEQA		CEQA done	Draft to CFGC		Public hearing a		Public hearing a			CFGC adopt	
8	Monitoring, research, evaluation 2055a(2)(f) Recommended monitoring and research criteria and framework						Begin CEQA		CEQA done	Draft to		Public hearing		Public hearing			CFGC adopt	
	Management and enforcement 2055a(2)(3)			Peer review			Begin CEQA		CEQA done	Draft to		Public hearing		Public hearing			CFGC adopt	
10	Improved enforcement 2055a(2)(3) Recommendations on enforcement		BPP adopt				Begin CEQA		CEQA done	Draft to		Public hearing		Public hearing			CFGC adopt	
10	Other elements of the Marine Life Protection Program to educating the public about MPAs and Funding for management 2055a(2)(g)		BPP adopt				Begin CEQA		CEQA done	Draft to		Public hearing		Public hearing			CFGC adopt	
	Recommendations on funding		Draft to BPP	BPP adopt			Begin CEQA		CEQA done	Draft to		Public hearing		Public hearing			CFGC adopt	
5	Alternative Networks 2055a(2)(2)						Begin CEQA		CEQA done	Draft to		Public hearing		Public hearing			CFGC adopt	

MLPA Initiative Memorandum of Understanding (MOU)

Structure of the MOU

- Objectives
- Recitals
- Commitments of the Parties
- General Provisions
- Standard Provisions
- Exhibits, such as Significant Milestones



Phase 2 MLPA Initiative MOU

Objectives

- Transparent, science-based process
- Opportunities for stakeholder involvement
- Roles and responsibilities of parties
- Process for delivery of MPA recommendations and rulemaking
- Development of information for process
- Support for Fish and Game Commission
- Integration of Department of Fish and Game
- Timely implementation of Central Coast MPAs

Phase 2 MLPA Initiative MOU

Recitals

- Interests and authorities of parties
- Commitment to publicly transparent, science-based process
- Department requests and Agency and RLFF provide assistance
- Commitments of the Parties
 - Resources Agency
 - Department of Fish and Game
 - Resources Legacy Fund Foundation (RLFF)

Phase 2 MLPA Initiative MOU

Resources Agency

- State policy leadership and direction
- Appoint members of a Blue Ribbon Task Force (BRTF)
- Charge BRTF, e.g. guide development of MPAs
- Identify staff liaison to BRTF
- State budget requests
- Office space and other support
- Support for implementation

Phase 2 MLPA Initiative MOU

Department of Fish and Game

- With BRTF, appoint members of regional stakeholder group (RSG)
- Appoint members of Science Advisory Team (SAT)
- Provide charters for RSG and SAT
- Participate in deliberations
- Provide staff, data, and other support
- Provide analysis and feasibility criteria for MPAs
- Participate in Initiative steering committee
- Brief Commission and Ocean Protection Council

Phase 2 MLPA Initiative MOU

Resources Legacy Fund Foundation

- Obtain, coordinate, and administer philanthropic investments
- Provide funding description to partners
- Fund and contract with consultants under direction of BRTF
- Fund reasonable expenses of BRTF, SAT, and RSG
- Funding and services support MOU and are not contingent on content of MPA recommendations

Phase 2 MLPA Initiative MOU

General Provisions

- BRTF, SAT, and RSG to convene in public and open meetings when majority present
- Regular opportunities for public input
- Final work products available to public
- If funds reduced, process may be changed
- Semiannual reports on milestones, challenges, accomplishments
- Department required by law to implement MPAs
- Quarterly meetings of parties

MLPA Initiative Design

Initiative Planning Bodies

Blue Ribbon Task Force (BRTF)

- Statewide interests
- Master Plan Framework
- Oversight

Science Advisory Team (SAT)

- MPA-design guidelines
- Advice to BRTF and RSG
- Evaluation of MPA proposals

Regional Stakeholder Group (RSG)









- Regional knowledge and interests
- Regional Profile
- Regional goals and objectives
- Alternative MPA network proposals

Support Staff

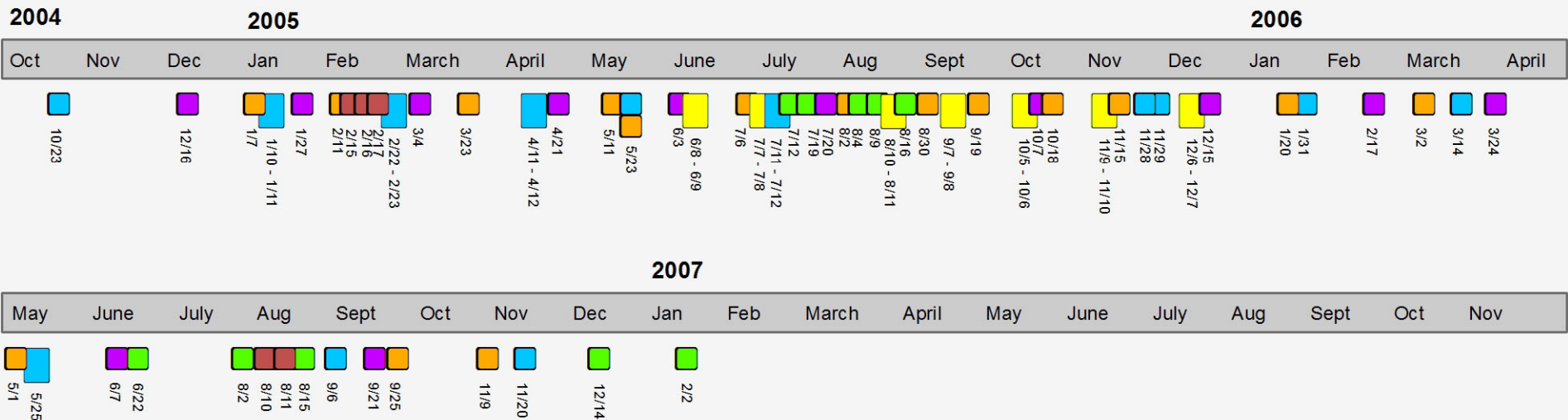
- Dept of Fish and Game staff
- Initiative staff
- Facilitators
- Consultants
- RLFF administration



Central Coast MLPA Meetings: Opportunities for Public Engagement

-  Fish and Game Commission (FGC)
-  Central Coast Regional Stakeholder Group (RSG)
-  Single Day Meeting
-  Blue Ribbon Task Force (BRTF)
-  Public Workshops (PW)
-  Multiple Day Meeting
-  Science Advisory Team (SAT)
-  Statewide Interests Group (SIG)

A group of stakeholders designs marine protected area proposals for each region, and public comment was taken at every meeting shown below.



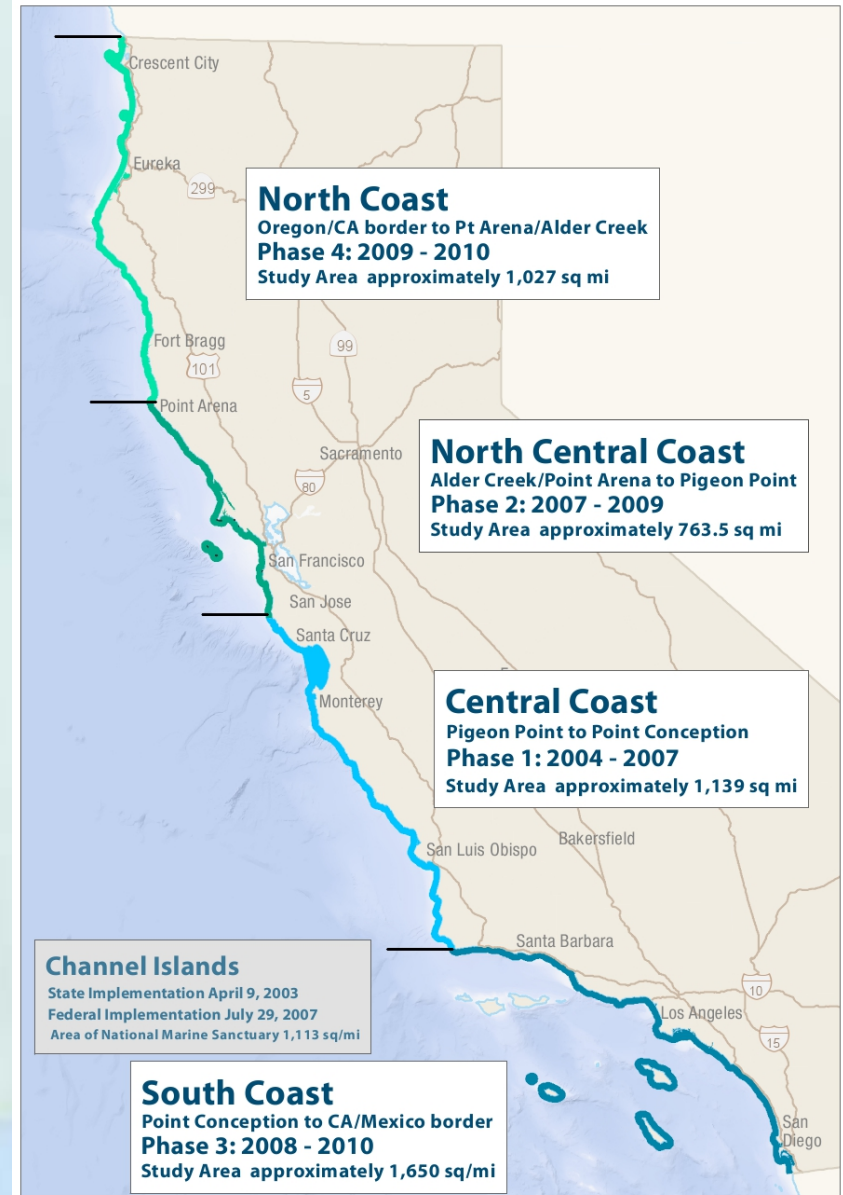
MLPA Initiative Design

Structure

Memorandum of Understanding

Deliverables:

- Phase 1: 2004 - 2007
 - framework
 - Central Coast MPA network
 - funding
- Phase 2: 2007 - 2009
 - North-Central Coast MPA network
- Phase 3: 2008 - 2011
 - South Coast MPA network
 - North Coast MPA network



Monitoring the Statewide MPA Network



MARINE PROTECTED AREAS MONITORING ENTERPRISE

NORTH CENTRAL COAST
MARINE PROTECTED AREAS
MONITORING PLAN

APRIL 2010

MARINE PROTECTED AREAS MONITORING ENTERPRISE

NORTH CENTRAL COAST
MARINE PROTECTED AREAS
MONITORING PLAN

APRIL 2010

MARINE PROTECTED AREAS MONITORING ENTERPRISE

NORTH CENTRAL COAST
MARINE PROTECTED AREAS
MONITORING PLAN

APRIL 2010

Kelp Forest

Why is Kelp Important?

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Current Status of Kelp in the North Central Coast

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The map illustrates the coastline from San Francisco Bay down to Santa Barbara. Key locations include:

- Monitoring Site #1:** Located near San Francisco Bay.
- Monitoring Site #2:** Located further south along the coast.
- New Ichthyosaurus Population:** Indicated by a red dot near Santa Barbara.

Geographical features and landmarks labeled include:

- Pearl Adria S.M.C.A.
- San Jose S.D.S.A.
- Sea Lion S.M.C.A.
- Tender Reef S.M.C.A.
- Del Sol Landing S.D.S.A.
- Twiner Reef S.D.S.A.
- Salt Pearl S.D.S.A.
- Rainbow S.M.C.A.
- Buckley Head S.D.S.A.
- Dennis Strait S.M.C.A.
- North Pointe Island S.D.S.A.
- South Bar Franchise Island S.D.S.A.
- Alameda S.D.S.A.
- Pillar Point S.M.C.A.
- El Estero de San Antonio
- El Estero de San Juan
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- El Estero de San Carlos del Rio
- El Estero de San Fernando del Rio
- El Estero de San Gabriel del Rio
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Kelp Forest

Why is Kelp Important?

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Current Status of Kelp in the North Central Coast

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The map illustrates the coastline from San Francisco Bay down to Santa Barbara. Key locations include:

- Monitoring Site #1:** Located near San Francisco Bay.
- Monitoring Site #2:** Located further south along the coast.
- New Ichthyosaurus Population:** Indicated by a red dot near Santa Barbara.

Geographical features and landmarks labeled include:

- Pearl Annex S.D.C.A.
- Sea Lion C.D.S.C.A.
- Tender Reef S.D.C.A.
- Del Sol Landing S.D.C.A.
- Tennessy Pearls S.D.P.
- Salt Pears S.D.P.
- Rainbow Pears S.D.C.A.
- Buckley Head S.D.P.
- Doubtful Strait S.D.C.A.
- North Pointe Island S.D.P.
- South Bar Franchise Island S.D.C.A.
- Alameda S.D.P.
- Pillar Point S.D.C.A.
- El Estero de San Antonio
- El Estero Llanero
- Dubouche S.D.P.

A legend titled "Marine Life Preserves" lists several preserves with corresponding color-coded markers:

- North Central Coast Marine Preserve
- San Francisco Bay Marine Preserve
- San Geronimo Island Marine Preserve
- San Juan Islands Marine Preserve
- San Pedro Channel Marine Preserve
- San Rafael Channel Marine Preserve

An inset photograph shows two seals swimming underwater.

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Kelp Forest

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The map illustrates the distribution and health of kelp forests along the North Central Coast. It features two main monitoring sites: Monitoring Site #1 (orange oval) near Pear Point and Monitoring Site #2 (yellow oval) further south. The coastline is marked with various locations including Pear Point, Sea Lion Cove, Seaside Reef, Del Sur Lighthouse, Tanager Point, Salt Point, Pismo Beach, Buckeye Head, Dunes State, North Pismo, Santa Barbara Island, Santa Barbara, Alondra, and Pismo. A legend titled 'Kelp Life Processes' indicates different stages of kelp growth and health: Green (Healthy), Yellow (Stressed), Red (Dead), and Blue (Non-existent). An inset map shows the location of the study area within California. A small photograph of a fish is included in the bottom left corner.

Kelp Forest

Why is Kelp Important?

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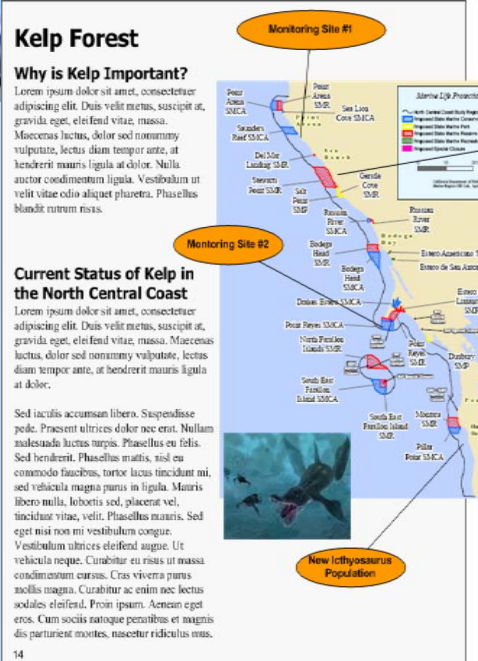
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Kelp Monitoring Study

Legend: April 2017 (blue), April 2020 (orange)

Category	April 2017 (Squares per meter)	April 2020 (Squares per meter)
-2.5	0.5	5.5
3.0	0.5	6.5
3.5	0.5	6.5
4.0	1.0	7.5
4.5	1.0	5.5
5.0	1.0	5.5
5.5	1.0	2.5
6.0	0.5	1.0
6.5	0.5	0.5

Implications for the Broader Region

Future Management Needs for Kelp Forest

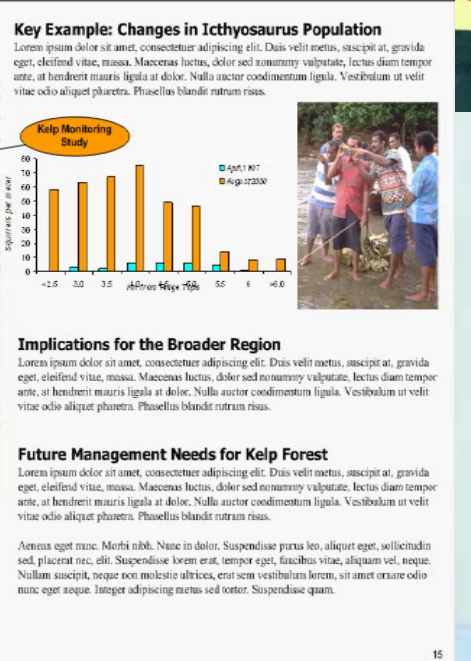
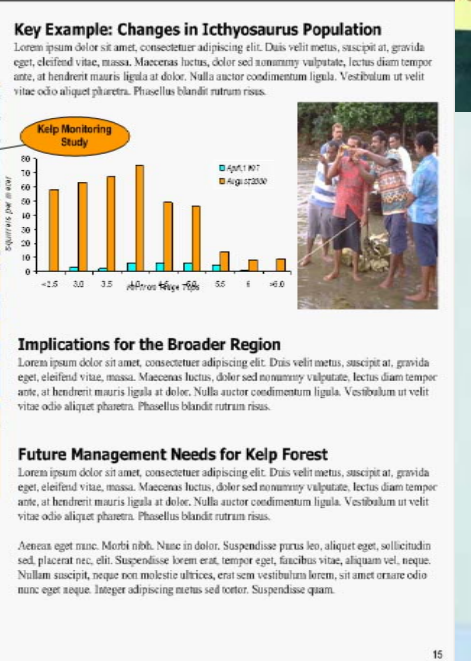
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Implications for the Broader Region

Future Management Needs for Kelp Forest

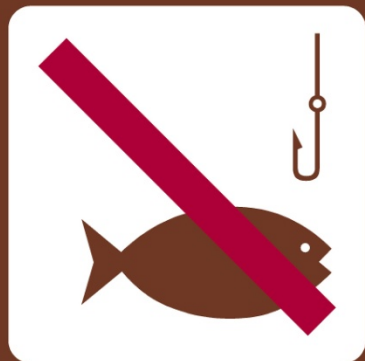
*Adopted by the California Fish and Game Commission on
April 7, 2010 and approved for inclusion in the MLPA Master Plan*

The logo for the California Ocean Science Trust (OST) features the word "CALIFORNIA" in a small, blue, sans-serif font at the top. Below it, the letters "OST" are prominently displayed in a large, blue, serif font. The letter "O" is stylized with two orange fish swimming horizontally through it. The letter "S" also has an orange fish swimming horizontally through it. The letter "T" has a small orange fish at its base. Below "OST", the words "Ocean Science Trust" are written in a smaller, blue, sans-serif font.

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MARINE PROTECTED AREA
STATE MARINE RESERVE



NO FISHING OR COLLECTING
C.C.R. TITLE 14, SECTION 632

Twenty-nine MPAs line our coast

A network of twenty-nine MPAs now protect our coastal waters from Pigeon Point to Point Conception. They cover 204 square miles (529 km²), including 85 square miles (220 km²) designated as fully protected marine reserves. Eventually the network will be expanded to include the entire California coast.



Reclaiming California's Coastal Riches

Marine Protected Areas Safeguard Our Ocean Treasures



Marine Protected Areas (MPAs) preserve special underwater places and their marine life. California is leading the nation by creating a statewide network of MPAs. MPA types and names vary, indicating limited to full protection.



Año Nuevo is a biodiversity hotspot, supporting countless species of fish, seabirds, and marine mammals. A canopy of kelp shelters marine invertebrates – vibrant sea stars, creeping anemone, and prickly sea urchins. Harbor seals and sea lions forage for fish among the kelp. Seabirds such as pelicans and marbled murrelets dive beneath the waves to find food. Here and in other protected areas along the coast, overfished species such as rockfish live long enough to reproduce and replenish populations. An abundance of life thrives due to the protection of these waters.



Get Your Feet Wet!

Become involved in ocean conservation

- Visit and enjoy MPAs
- Learn more at <http://www.dfg.ca.gov/mlpa/>
- Donate or volunteer
- Spread the word

MPAs ≈ Good for the Ocean, Good for You!



Giant Kelp



Canary Rockfish



Purple Sea Urchin



Red Abalone



Kelp Greenling



id



ed



Sources of additional information

- MLPA Initiative website: www.dfg.ca.gov/mlpa/
- MarineMap: www.marinemap.org/mlpa
- Ecotrust: www.ecotrust.org/mlpa
- Science-based and stakeholder-driven marine protected area network planning: A successful case study from north central California, by Gleason et al., in *Ocean and Coastal Management* (2010)

The image displays three overlapping screenshots of websites related to the Marine Life Protection Act (MLPA) Initiative.

- Ecotrust:** The top-left screenshot shows the Ecotrust website. It features a green circular logo with a stylized 'e' and the word 'ecotrust' in a sans-serif font. Below the logo are two tabs labeled 'ABOUT' and 'NEWS'. A large photograph of a coastal landscape with mountains and water is visible. A 'DONATE >>' button is present. The text 'Marine Life Protection' and 'Fisheries Uses and Values Project' is partially visible.
- MarineMap:** The middle screenshot shows the MarineMap website. It has a blue and white color scheme. The logo features a stylized compass rose with the words 'marine map' in a sans-serif font. Below the logo is a navigation bar with 'Decision Support Tool', 'Services', and 'News'. A 'Take a Tour' button is visible. The text 'MarineMap is a web-based decision support tool for open and participatory spatial planning of the marine environment...' is partially visible.
- California Department of Fish and Game:** The bottom-right screenshot shows the California Department of Fish and Game website. It features a green and white color scheme. The logo includes the text 'CA.GOV FISH AND GAME' and a fish icon. A navigation bar includes 'Home', 'Recreation', 'Resource Management', 'Enforcement', 'Marine', 'Spills', 'Education', 'Publications', and 'Data & Maps'. The 'Marine Life Protection Act Initiative' is highlighted. A 'Marine Life Protection Act Initiative' section is visible, including a 'Take a Tour' button and a 'Launch MarineMap DST' button. The text 'MarineMap is a web-based decision support tool for open and participatory spatial planning of the marine environment...' is partially visible.



Resources Legacy Fund Foundation

The Marine Life Protection Act Initiative

Mike Weber, Program Officer—Oceans, Coasts, and Fisheries
California Biodiversity Council Meeting
March 24, 2011

Statewide MPA Network Implementation MOU

- **Through December 2014**
- **Signatories**
 - California Ocean Protection Council
 - California Natural Resources Agency
 - California Environmental Protection Agency
 - California Department of Fish and Game
 - California Department of Parks and Recreation
 - State Water Resources Control Board
 - National Oceanic & Atmospheric Administration
 - National Park Service
 - Department of Defense
 - California Ocean Science Trust
 - Resources Legacy Fund Foundation

Statewide MPA Network Implementation MOU

- **Recitals**

- Importance of cooperative actions for monitoring, public education, enforcement, etc.
- MOU and regional agreements as framework for cooperation

- **Commitments**

- Collaborate to implement MPA network in support of lead agency
- Specific strengths of different partners
- Identify and engage other partners, and commit through regional agreements

Statewide MPA Network Implementation MOU

Commitments (contd)

- Coordinate with other agencies, including
 - U.S. Coast Guard
 - Bureau of Land Management
 - Bureau of Indian Affairs
 - Army Corps of Engineers
 - California Fish and Game Commission
 - California Native American Heritage Commission
 - California Coastal Conservancy
 - California Coastal Commission
 - San Francisco Bay Conservation and Development Commission
 - State Lands Commission
 - Regional Water Quality Control Boards

Statewide MPA Network Implementation MOU

Commitments (contd)

- Chair of Ocean Protection Council to convene senior representatives and other entities twice a year
- Natural Resources Secretary annual report
- Designate staff consistent with commitments and available resources
- Designate policy-level official responsible for coordinating
- Miscellaneous provisions, such as amendment, fiscal commitments, severability